Panasonic CONNECT

High accuracy, high quality, ultrasonic flip-chip device bonding.

MD-P200 Die Bonder

Unit Level Manufacturing by the synchro-motion of dispensing and bondingThe MD-P200's die bonding is carried out immediately after epoxy dispensing, thereby making it possible to finish the bonding operation before the epoxy has deteriorated. This realizes stable and high quality bonding at all bond positions on a substrate. In addition, the bonding stage camera enables pre-bonding inspection immediately after epoxy dispensing and post-bonding control immediately after the bonding of a die. This process enables manufacturing with real-time quality inspection.User-friendly operationA large touch panel and interactive software realize an easy and reliable operating environment for all users from beginners to experts.

Key Features

- High accuracy
- Ultrasonic flip-chip device bonding
- High quality bonding process
- Easy and reliable operating environment
- Manufacturing with real-time quality inspection.

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MD-P200 Die Bonder

https://ap.connect.panasonic.com/ph/en/products/microelectronics/md-p200-die-bonder

Model Number	NM-EFD1B
Productivity	0.56s/IC (Under the fastest conditions) 0.75s/IC for thermosonic bonding(Including process time of 0.2 seconds. Under the fastest conditions)
Placement Accuracy	XY (3σ at PFSC conditions): ±7μm (Flip bonding), ±15μm (With pre-centering), ±25μm (Direct bonding)
Substrate dimensions	L 50 x W 30 to L 280 x W 140 (For thermosonic: L 200mm x W 150mm)
Die dimensions (mm)	L 0.25 x W 0.25 to L 6 x W 6
Number of die types	Up to 12 types (For AWC)/ Up to 10 types (Tray with the palette changer)/ Up to 5 types (Wafer frame with the palette changer)
Configuration of die feeder	Wafer frame, Pre-expanded ring, Tray
Adhesive dispenser	Air-powered writing, Stamping pin
Bonding Load	Pneumatic head: 0.5N to 10N (Option: 1N to 50N) VCM head for thermosonic process: 1N to 50N (Option: 2N to 100N)
Head Heating	Constant heating, Up to 250℃ for the pneumatic head, Up to 300℃ for the VCM head
Substrate Heating	Constant heating, Up to 300℃
Number of nozzles	Up to 24 nozzles (Pickup nozzle, Bonding nozzle, Stamping tool) (Not available for the thermosonic nozzle)
Power Source	3-phase AC 200V ±10V, 50 / 60Hz, Up to 4kVA (Up to 7kVA for heating specification)
Pneumatic Source	0.5MPa, 30L/min (A.N.R.) (Up to 150L/min for full-featured machine including cooling air)
Dimensions (mm)	Standard specification (Up to 200mm substrate length. including loader/unloader) W 1950mm x D 1370mm x H 1720mm (Machine body: W 1190 mm x D 1190mm x H 1720mm)
Mass	2200kg (including loader / unloader)